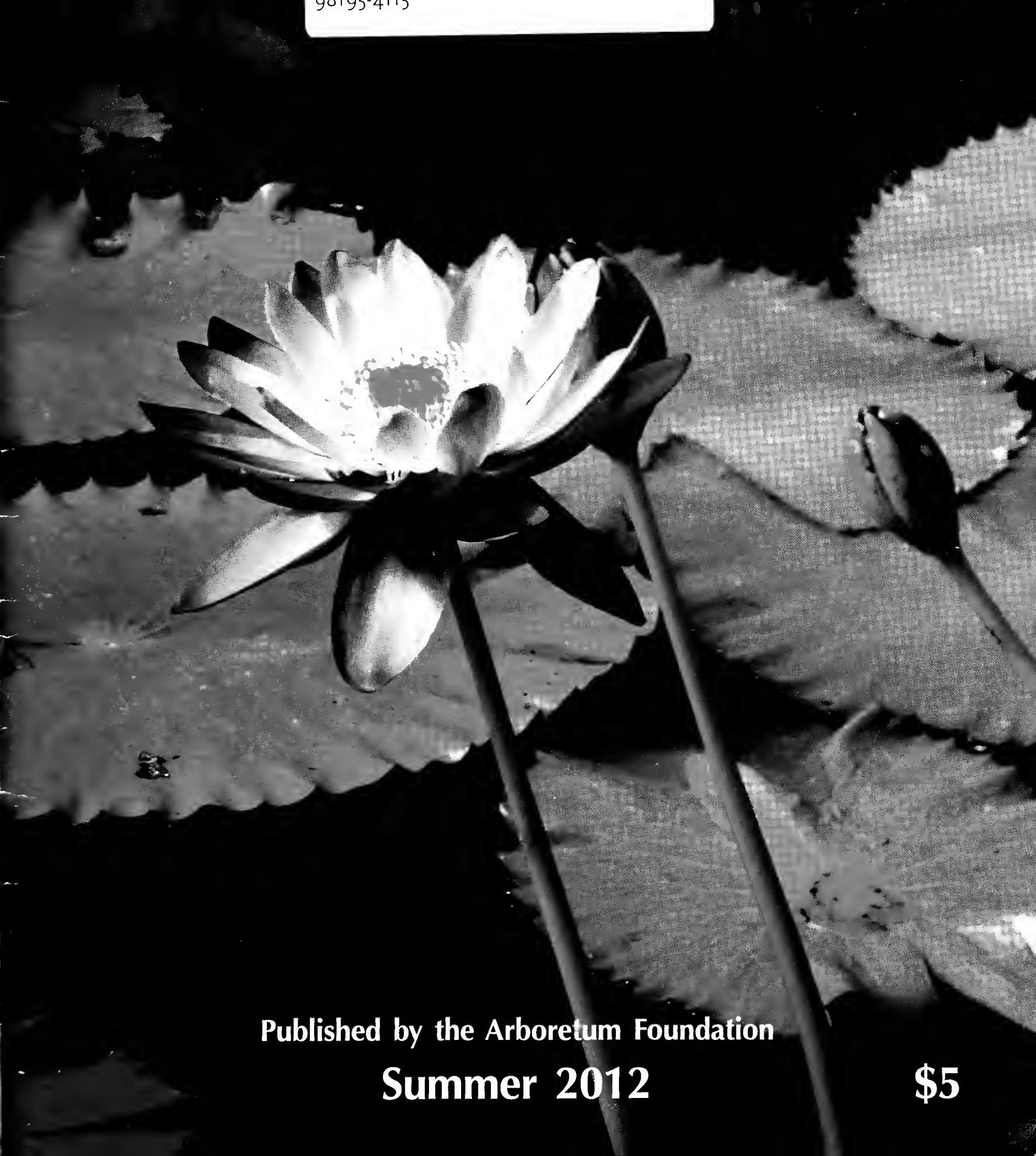


Washington Park Arboretum

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The Arboretum is a 230-acre dynamic garden of trees and shrubs, displaying internationally renowned collections of oaks, conifers, camellias, Japanese and other maples, hollies and a profusion of woody plants from the Pacific Northwest and around the world. Aesthetic enjoyment gracefully co-exists with science in this spectacular urban green space on the shores of Lake Washington. Visitors come to learn, explore, relax or reflect in Seattle's largest public garden.

The Washington Park Arboretum is managed cooperatively by the University of Washington Botanic Gardens and Seattle Parks and Recreation; the Arboretum Foundation is its major support organization.

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ABOVE: A meadow of lupines in the gardens at Chatsworth House in Derbyshire, England. (Photograph by Riz Reyes)

ON THE COVER: A bright-blue *Nymphaea* bloom, with the stunning leaves of *Victoria amazonica* in the background. The photograph was taken at Kew Gardens by Riz Reyes, the Orin and Althea Soest Gardener at the Center of Urban Horticulture in Seattle, at the same time he was visiting the Chelsea Garden Show in London in 2011. To catch up on Riz's latest adventures, you can visit his blog: nextgenerationgardener.blogspot.com.

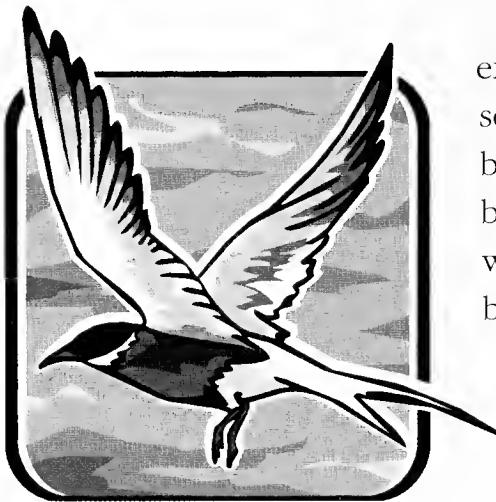
Thank You

The call that I had been dreading came one morning in late April:

At the age of 90, my dad had just lost his battle with Parkinson's disease. How does one cope with such profound loss? I chose to stop at my daughter's home to share the news with her, to hug her little children, and to cry. Then, I drove to keep my appointment at the Muckleshoot reservation to meet with tribal leaders and others from WSDOT and the Arboretum about some issues on Foster Island. Who better to spend that morning with than people who have such profound veneration and respect for those who have come before us?

Back at the Arboretum that afternoon, I walked down Azalea Way in a light rain, remembering so many walks with Dad, learning the names of trees; learning to listen—really listen—to the sounds of the woods; listening to him mimic with uncanny ability the calls of so many birds; learning from him to love just being out in the natural world. This was his legacy to me. The beauty and tranquility of the Arboretum provided some solace when little else could. I was so lucky to be able to immerse myself in this place, this special place that is the legacy that so many others have left to all of us.

So many of you love our Arboretum and care for it with your volunteer time, your financial support, and often with both. Recently, a volunteer came to see me in the Visitors Center. He expressed his condolences on the loss of my father and told me of his parents and how much they had meant to him. He also told me that he was planning to change his will. He has no children and his



extended family is financially secure. "I grew up in this neighborhood and still live here. I began coming to the Arboretum with my parents when I was a boy. This Mother's Day I came walking here and saw hundreds of families from all kinds of backgrounds enjoying the Arboretum. I want to help sustain it for the future."

We talked about how he might do that, through a restricted or unrestricted gift, a permanent endowment gift, or some combination of these. We talked about what was important to him and then he left with some sample language, promising to let me know how he would distribute his bequest. He is about my age, so I expect that he will be visiting the Arboretum for a long time to come, but his gift one day will help to maintain and carry forward this special place. It will be his legacy to those who come after us.

The last few years have been hard ones in the Arboretum. The economic downturn has really diminished our public support and even our revenue from events like our plant sales. Maintaining what we have has been a struggle. But, even now, I can't help but feel how lucky we are in Seattle to have a place like the Arboretum and citizens like this volunteer with such generosity of spirit.

We sincerely appreciate all of you who share your spirit and time and treasure with us. Your generosity, too, provides great solace—even as my sense of loss is still so deep. Thank you. ~

Cheers,

Paige Miller

Paige Miller, Executive Director,
Arboretum Foundation

MY VISION FOR THE FUTURE OF THE UNIVERSITY OF WASHINGTON BOTANIC GARDENS:

An Interview with Sarah Reichard

BY JOHN A. WOTT

Sarah Reichard, Ph.D., is the Orin and Althea Soest Chair for Urban Horticulture Director of the University of Washington Botanic Gardens. This interview was conducted by John A. Wott, Ph.D., Director Emeritus, on February 2, 2012.

Dr. Wott: Tell me how you became interested in plants, in the environment (with people in it), and in the type of work you find yourself in today.

Dr. Reichard: When I was growing up, my mother had a Ph.D. in botany from Louisiana State University and was employed at Wake Forest University. She often picked me up after school, and I would go back to her university lab and greenhouse. I watered the plants. My father was also a gardener, working in our home garden when he wasn't playing golf. But as a "normal" teenager, I resisted wanting to do what your parents do. But during my first quarter of college, I thought, "I know about plants, so I will take an easy course: Botany 101." I found that there really was so much more about plants that I did not know. Plants were cool, and soon I became a botany major. After

graduation, I managed a nursery and landscape service, where I really learned more about plants. After five years, I decided to go to grad school and enrolled at the University of Washington (UW). There was a new faculty member, Clem Hamilton (who later became a director), who was conducting horticultural taxonomy studies. I decided to study horticultural taxonomy, in which I received my M.S. degree. I also realized that I wanted to do something which would help the environment, so I became interested in the fact that plants introduced for horticulture purposes often have a negative impact on natural lands. I was just hooked on that area, and it is still something I find wildly gratifying to study. After finishing my Ph.D. in "Assessing the Potential of Invasiveness in Woody Plants Introduced to North America" in 1994, I obtained a post-doctorate position in



ABOVE: Friends and colleagues: Drs. John A. Wott and Sarah Reichard.

Hawaii for two years. Then I returned to the Center for Urban Horticulture (CUH) as a faculty member in 1997, where I have been since.

Dr. Wott: What intrigues you about this position as director; what is most exciting?

Dr. Reichard: I have watched all the previous directors, including Dr. Harold Tukey, the founding director, and you, and I have learned from all of them. There are tremendous opportunities ahead at both CUH and Washington Park Arboretum (WPA). I think what excites me the most is providing opportunities for students, both undergrads and grads, to get involved in every aspect which goes on here. They can serve on committees, work in curation, or write interpretation for the WPA. We have art and music students doing projects in the WPA and business students helping us with our branding images. It is really fun to think how we can bring students into our entire system to work with us on some of our challenges. The

Dr. Reichard: As I mentioned, I have observed all the previous directors, and I have learned from their experiences, both the good ones and also those where they did not always obtain the result they desired. I am an educator, which I believe is an important thing for the director to be. We are an educational institution. My research specialties are appropriate for us at this point in time. I am interested in sustainability, conservation and restoration. Institutions need leaders with different skill sets at different points in their history, and I am hoping that history will show that I am the right person with the right skill set at this point in time.

Dr. Wott: You have been director for a few months, on a sharp learning curve. What are some of your ambitions and ideas?

Dr. Reichard: I spent a lot of time in those early months thinking about initiatives, thinking about what I would want to see happen. The core thing I want is a better situation whereby

staff also likes the student involvement very much. When I am working with students, and when I see the bright light in the eyes of a talented student, it is immensely satisfying. I believe the staff also feels that energy.

Dr. Wott: When did you officially become the director?

Dr. Reichard: It was July 1, 2011. I had been serving as interim director and had had conversations with Dr. Tom Hinkley, who is with the School of Environmental and Forestry Sciences. Sandra Lier, who was the current director, had to leave suddenly. Dr. Hinkley asked me to step in quickly. Even though I have been here for a long time, I had a lot to learn. This is a complicated place, especially the WPA. So I had a steep learning curve, but people were patient with me, helping me to learn quickly.

Dr. Wott: Why do you think you have the right qualifications for this position?

the administration understands us and how we connect with students on many levels. Secondly, I want to leave the institution in a better situation financially. My thoughts are about how to get there.

In thinking about our future, I have arrived at four guiding principles to help me figure out my priorities.

Provide value to students through education, research and recreation. Students should be involved in all aspects of UWBG, and students from all units within the UW should be included. For example, we now have a one-acre UW farm on our grounds. They are growing vegetable crops in cooperation with Tilth, a Seattle-based sustainable agriculture organization. We are looking forward to art installations, such as the forthcoming "Music of Trees" installation in the WPA. We are working with students in landscape architecture on designs. Many of them serve on committees. Students from museology are writing

interpretation. We are really trying to reach out to all branches of campus, not just to the sciences but also to arts and business.

Dr. Wott: It seems like the interest of the UW administration in the WPA has waned, or greatly diminished—even to the point of budget elimination. We have heard that the UW does not do anything in the Arboretum anymore. Is this true? Or, if not, what can be done to counter this belief?

Dr. Reichard: U of W programs **have been** involving students in the Arboretum. Obviously it is much easier to see the involvement at CUH, where we have student offices and classes. However, we also have classes in the Arboretum. For example, the woody-plant ID class, which I have taught, is almost solely taught there. We have soil classes which teach about the diverse soils in WPA, and hydrology classes which study its underground water movement. The problem is that we were complacent, or ineffective, in communicating with the U of W administration about all our Arboretum classes. They were not able to see our programs at work on our 230-acre Arboretum site. They spend their time on the UW campus. We now have a special student project area on our Web site so it is much more transparent. I am meeting with groups all over campus. Today I met with a group of art faculty to help students decide about possible projects. I am reaching out to the whole campus.

Dr. Wott: What is your second guiding principle?

Dr. Reichard: **Provide value to the greater community at large by enhancing the visitor experience. Provide opportunities for education, public health, art and appreciation of nature in a comfortable and stimulating environment.** We have always had weekend walks in the WPA, but we are increasing the number. We have begun work on public health walks. We are developing a conifer walk and a history walk, which goes by the historic stone benches and the gazebo. Visitors can visit the WPA, and through interpretation they can learn about the history and

the plants. We would also like to incorporate art. I would also like to improve the Graham Visitors Center with more seating and provide coffee, tea or cocoa. Why not have more picnics, make it all more user friendly!

My big dream concerns the old university greenhouse. We could use the footprint to build a beautiful conservatory structure. One part would be a small café for a coffee and light meals. Perhaps the current small food garden behind it could be enlarged and produce some of the food which would be served in the café. The other part could be an atrium which would be used by the Education Department during the day, and in the evening it might be rented out for revenue and community enjoyment and meetings. I am trying to provide a restorative connection with nature when people visit the WPA. They would leave better informed about the world around them. We are an educational institution, and this provides a critical educational message.

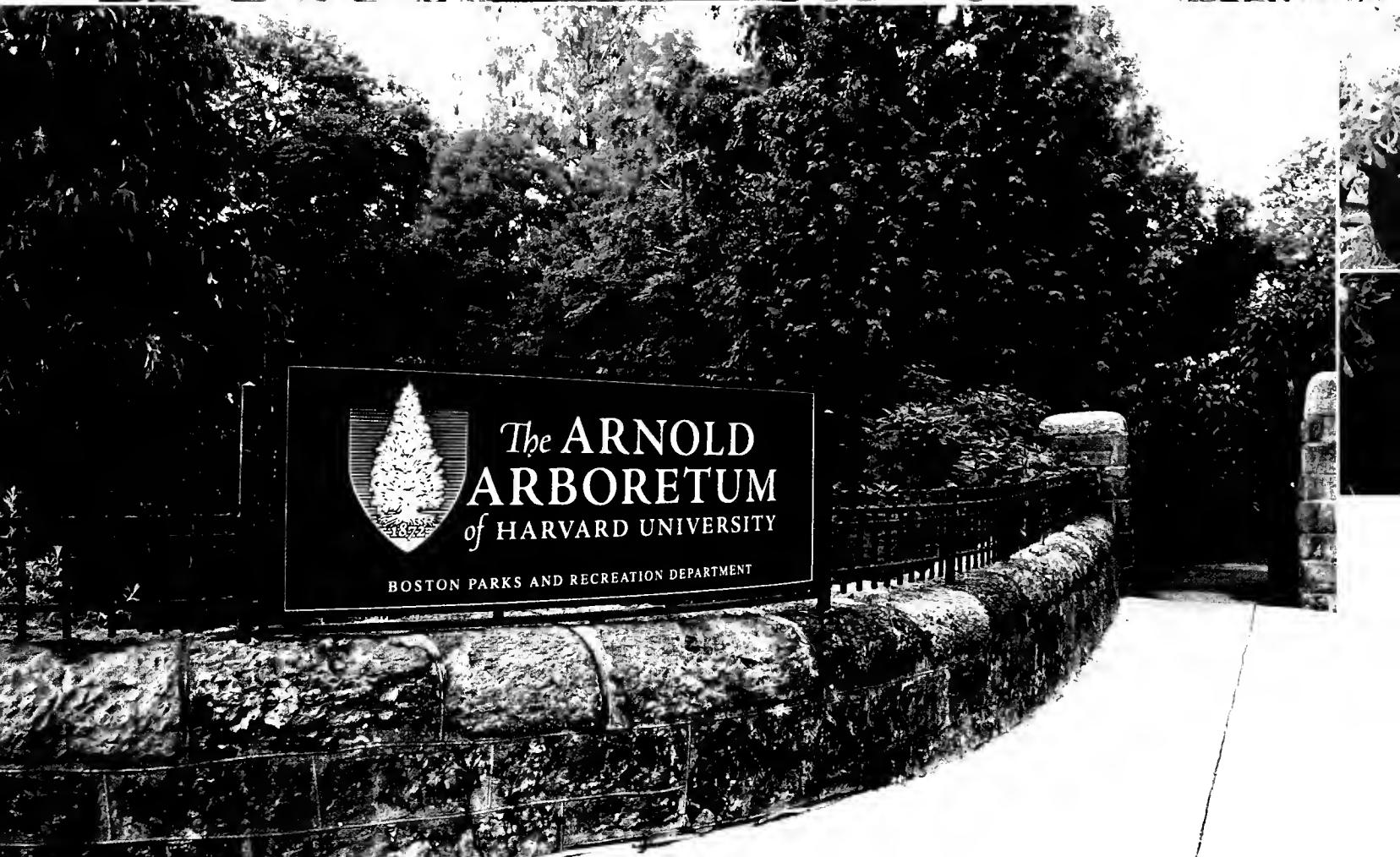
Dr. Wott: I believe you have a third guiding principle.

Dr. Reichard: **More self sufficiency through increased revenue, gifts and increasing endowments. Improve efficiency to maximize our limited resources.** Some of the ideas include the café and atrium. We need to increase endowments. We will also have some SR-520 mitigation money coming to us in the future. We are exploring a major fundraising signature event. We are working with business students at the UW on how to communicate to the public about ourselves. We are a complicated place: two locations, numerous names such as CUH, Union Bay Natural Area (UBNA), WPA and UWBG. It's confusing, so we need help to better market ourselves.

Dr. Wott: I believe you have one more guiding principle...

Dr. Reichard: **Strive for innovation in everything we do.** We **ARE** the University of Washington, and the UW is about innovation. In many ways, we are still trying to get up to

Continues on page 29





Boston's Arnold Arboretum: A Multihued Jewel

TEXT AND PHOTOGRAPHS BY DANIEL MOUNT

When I arrived at the information desk at the Arnold Arboretum one day last June, the receptionist—being a good host—kindly apologized for there “not being much in bloom now.” I had taken a red-

eye flight from Seattle to Boston the previous night and, with the urgency of a pilgrim, had simply dropped my bags at my hotel and headed out to the most famous and best-documented woody-plant collection in North America. My

ABOVE: *Kalmia latifolia 'Polypetala'*

INSET LEFT: Arborway Gate leads into 265-acre Arnold Arboretum.



host shared with me a foldout map that showed the easiest way to the mountain laurel (*Kalmia latifolia*) collection, which was sure to be in bloom. Oddly enough, despite the host's concern, I had not come to see flowers. All I knew at that moment was that a walk through the young, effervescent green of late spring would be the best antidote to the fatigue of spending the night upright and sleepless in the sterile bowels of a jet.

I thanked my host and wandered off into the Arnold and into June, the greenest month I know. I immediately felt comfortable in the landscape, and I was not hard-pressed to find green. The expansive lawns with towering specimen trees, typical of 19th-century parks, were lush with growth. But the Arnold, which opened to the public on March 26, 1872, is unique in its position among such parks: It is the first American public arboretum.

The historian Ida Hays, in her book "Science in the Pleasure Ground: A History of the Arnold Arboretum," sees the birth of the Arnold as a

culmination of many trends and ideals in 19th-century American society. At that time, Boston was nearly 200 years old and a very prosperous city. As a center of post-Revolutionary War cultural life, it was home to the Transcendentalists, Quakers and Unitarians, who all were trying to create a peaceable new kingdom in the recently established nation. One can see the beginnings of our current green movement in the thoughts and developing practices of the time, as we shall see below.

One man moved by these ideas was Benjamin Bussey, a self-made businessman who acquired a large tract of land in West Roxbury outside of Boston. As a member of the Massachusetts Society for Promoting Agriculture, he was inspired by the Society's new ideas for land management. He let portions of his holding revert back to forest, but this did not stop him from collecting ornamentals and landscaping portions of his estate in the grand English landscape tradition that was popular in the new country at the time. Nor did it keep him from

ABOVE: *Hydrangea heteromalla* in full bloom in June.

farming; he had extensive and productive orchards and raised a wide variety of livestock. Bussey also generously opened his land to the public because he believed exposure to nature is a refreshing part of human experience. In this sense, his land had already entered the public domain before he bequeathed it to Harvard College in 1842 for use in the advancement of agriculture.

Another self-made man, James Arnold (whose name later became attached to Harvard's arboretum), was a whaler by trade yet took great interest in horticulture. With his wife, Sarah, Arnold used his fortune to create a celebrated garden in New Bedford, Massachusetts. His generous bequeathal of funds to three trustees, "to be applied by them for the promotion of Agriculture, or Horticultural improvements, or other Philosophical or Philanthropic pursuits," would eventually help fund the building of Arnold Arboretum. One of the trustees, Arnold's brother-in-law George B. Emerson, was an educator and strong supporter of new practices in forestry; he also supported studies of the New England forest, which had been extensively cleared by his day. Long before carbon sequestration was on anyone's mind, Emerson was a proponent of forest conservation. He believed the benefits of well-managed forests included stabilized and improved soils, moderation of the climate, and the provision of materials for fuel and construction. Along with the Harvard botanist Asa Gray, he helped establish botany as a field of study at Harvard and was integral in turning Bussey's land into a woody-plant collection, which was named the Harvard Botanical Garden.

At the same time, in England, the Scottish botanist and garden writer John C. Loudon coined the word "arboretum" to describe the collections of woody plants that were starting to grow there, both in numbers and popularity. Loudon set forth some guiding principles for developing such collections into arboreta. First, he defined an arboretum as a tree and shrub collection that includes only woody plants that are hardy

outdoors where the garden is located. Second, an arboretum should be all-inclusive, with at least one specimen grown of every species fitting this criterion. Third, the plants must be arranged in a rational order, preferably according to the natural system of classification put forward by Bentham and Hooker in their book "Genera Plantarum" (1862)—which advocated a new system dividing plants into monocots, dicots and gymnosperms, but did not yet acknowledge evolutionary relationships. And last, Loudon concluded, the collection must be labeled. These guiding principles, which are still used by arboreta today, influenced the first director of the Arnold Arboretum, Charles S. Sargent.

Sargent, a member of a wealthy Boston family, had grown up seeing the development of many private pleasure gardens and plant collections in the Boston area. He was only 32 when he became director of the Harvard Botanical Garden and its newly created woody-plant collection, the Arnold Arboretum, in 1873.

In 1874, a 120-acre section of the Harvard-owned Bussey estate was allocated to the new arboretum. As director, one of the first things Sargent did was to survey Bussey's farm, which Sargent described as "worn out." Despite this assessment, he documented 123 woody species on the site. Eighty of those were indigenous to the place, and the rest were ornamentals or orchard fruits that Bussey had planted.

Red oak (*Quercus rubra*), white oak (*Q. alba*) and black oak (*Q. velutina*); American beech (*Fagus grandifolia*); and sugar maple (*Acer saccharinum*)—all accessioned at that time—are still present in the Arboretum's living collections. American elms (*Ulmus americana*), white pines (*Pinus strobus*) and a large stand of hemlock (*Tsuga canadensis*) dominated the landscape. Among the non-natives Bussey planted for their ornamental value, Sargent encountered southern trees like catalpa (*Catalpa bignonioides*) and tulip tree (*Liriodendron tulipifera*), and European natives like horse chestnut (*Aesculus hippocastanum*) and Scotch pine (*Pinus sylvestris*). He also found great hedges of lilacs



(*Syringa vulgaris*), which were popular with visitors in Bussey's day.

Sargent was an energetic man and began his new project of developing an arboretum with zeal. He started with editing. Thinning and managing a woodlot was a relatively new concept at the time, and the Arnold became a demonstration ground for arboriculture. In its first year, the nascent Arboretum raised 267 kinds of woody plants from seeds, although Sargent's enthusiasm for an "all-inclusive" collection became, over time, focused on the natives of eastern North America, primarily of New England.

Sargent, intrigued by the design work Frederick Law Olmsted and Calvert Vaux were doing in New York's Central Park, invited

Olmsted to work with him on the Arnold Arboretum. Their 25-year collaboration involved politics and planning, construction and collecting, and—of course—waiting. Due to Olmsted's insistence, neighboring properties were annexed, until the original 120-acre parcel of Bussey's land expanded to the 265-acre park of today. Olmsted deferred a great deal of the layout of the collection to Sargent, whose knowledge of dendrology he considered far superior to his own. Meanwhile, Olmsted designed the carriageways, bridges, ponds and footpaths that transect the park to this day. In the process of designing and planting Arnold Arboretum, Sargent and Olmsted created a template for future arboreta throughout North America and the world.

Sargent's connection to European botanical

ABOVE: *Silphium petiolaris* and cattails in The Meadow, with the *Salix* collection in the background.

OPPOSITE TOP: A *Taxus cuspidata* donated by the Hunnewell Pinetum in 1884.

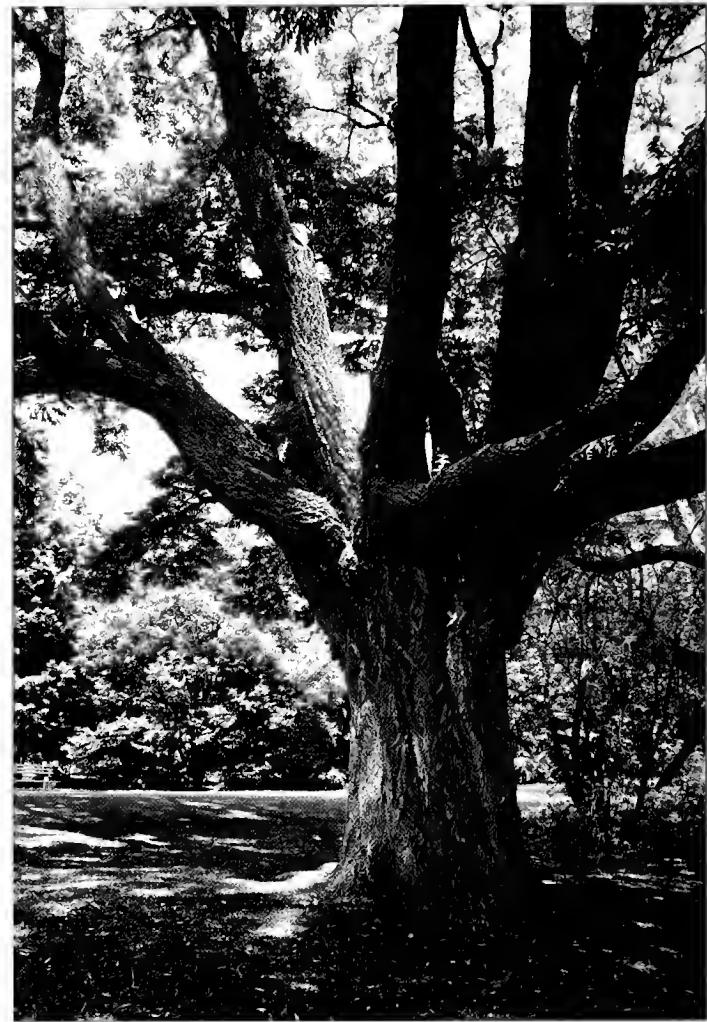
OPPOSITE BOTTOM: *Dipelta floribunda* (bracts).



institutions brought many new species into the burgeoning collections. He took collecting trips throughout New England and to the Southeast. He also traveled westward with the eminent St. Louis-based botanist George Engelmann. You must remember there were no “red-eyes” at that time; traveling by train, carriage and horseback, Sargent and Engelmann covered great expanses of Colorado and the West Coast, from San Francisco to British Columbia, recording what they saw and collecting herbarium specimens and seeds.

In the early 1890s a new building was constructed to house the Arboretum’s library, herbarium and administrative offices. It was named after H.H. Hunnewell, a relation of the Sargent family who provided the funding. Hunnewell had a keen interest in trees, particularly conifers, and was developing a pinetum at his estate in Wellesley. (A massive *Taxus cuspidata*, donated from this collection to the Arnold in 1884, still grows in the conifer collection.) In 1892, Sargent—curious about Asa Gray’s groundbreaking hypothesis connecting the floras of eastern Asia and eastern North America—was off to Japan to see for himself the commonalities between the plants of these distant parts of the world. This was only the beginning of an ongoing exchange of ideas and plants between the Arnold and the Far East. English plantsman Roy Lancaster lauds Sargent by saying “his encouragement and support of plant exploration... in the Far East on the Arboretum’s behalf was perhaps his most enduring contribution to temperate gardens.” The Sargent’s cherry (*Prunus sargentii*), which Sargent had carried back as seed from Hokkaido, is just one example of this contribution.

Sargent, learning as he worked, quickly became a landscape designer, an administrator and a leading dendrologist. His 14-volume “The Silva of North America” and the more compact version, “A Manual of the Trees of North America



Exclusive of Mexico,” are still in use.

Today the Arnold Arboretum remains a healthy and vibrant institution, despite its age. There have been five directors since Sargent died in 1927, all of them making important contributions to the Arnold during its last 85 years. As of March 2012, the Arnold possesses 15,101 individual plants, including nursery holdings. The plants represent 96 families, 338 genera and 2,171 species. And the numbers continue to grow. Michael Dosmann, Curator of Living Collections, estimates the Arboretum accessions to be between 400 and 600 seeds, cuttings and plants a year. Plant Records Manager Kyle Port checks the entire permanent collection for labels every five years. In 2011, Port hung 2,471 aluminum tags.

The Arnold continues its long commitment to studying the flora of Asia and supports studies in a diverse range of disciplines, including evolutionary biology, plant physiology, biodiversity

ABOVE: An *Acer saccharinum*, the largest tree in the Arboretum, was started from seed in 1881.

and ecology. This eminent collection and research facility attracts researchers from England and Europe, as well as the U.S. And it works in partnership with the Smithsonian Institute on research in tropical areas around the world. In January of 2011, the Arboretum opened the Weld Hill Research Facility, a state-of-the-art LEED Gold building—a further indication of the institute's commitment to these areas of research.

I gave myself a generous three days to wander over and around the three drumlins that punctuate the topography of the Arnold Arboretum. It is a landscape shaped by glaciers, with outcroppings of Roxbury puddingstone and swampy lowlands, and has the third-largest hill in the Boston area, Peter's Hill, with a 180-degree view of downtown Boston. It is easy to forget that the Arnold is a landscape also shaped by man. Today, the “worn out” farmland Sargent and Olmsted shaped into a jewel-like park seems casual, even wild, in parts.

I walked Olmsted's now blacktop-covered gravel carriageways, as well as his footpaths and mown lawns, and waded through rain-soaked swards to get closer to interesting specimens. At such moments, history seemed to vanish. What mattered was the here and now: the vibrant and ripe greens of June.

And the flowers; there were plenty of flowers! I may have missed the mid-May Lilac Sunday, when 30,000 visitors throng the park, but I did not miss the blooming Kentucky and American wisterias, hydrangeas and buddleias. And, of course, the mountain laurels. If you've ever tried to grow them in the Pacific Northwest, you would no doubt be envious, like me, of the magnificent stands the Arnold possesses.

Finally, I crossed Bussey Brook, one of the last open tributaries to Boston's Charles River, in search of the Arboretum's biggest, oldest and rarest plants. Why did I need to stimulate myself with the pursuit of superlatives, while other people were happy to jog, walk their dog, or make out with their girlfriend on a bench? It was just a park. But what a park!

I was surprised to find out that the biggest

tree in the collection was a 130-year-old silver maple (*Acer saccharinum*). The oldest happens to be a 275-year-old bonsai in the Larz Anderson Bonsai Collection, part of the Arboretum since the 1940s. The rarest most probably is Sargent's oak (*Quercus x sargentii*), an inter-specific hybrid between the English oak (*Q. robur*) and the Chestnut oak (*Q. prinus*), which exists only at the Arnold and a few other botanical institutions around the world. Sargent himself collected the seed at his home estate in Brookline in 1877. The over 130-year-old specimen is as stately an oak as I've ever seen.

And there were plants I'd never seen before, such as false indigo bush (*Amorpha fruticosa*). Why have I never run into or seen in Pacific Northwest gardens this sometimes invasive plant, which is native from coast to coast? Or rosy dipelta (*Dipelta florabunda*), with its bright-pink bracts and glossy foliage making it look like a giant begonia? But I do know why Farges's filbert (*Corylus fargesii*) isn't available: It is a recent introduction from China by the Arnold that has a fine pyramidal form and beautiful, exfoliating bark; ease of cultivation should make it popular with landscapers and gardeners in the future.

Even I become exhausted by plants after a while and must find a bench. (The grass was much too wet to sit on during the rainy days of my visit.) “It must reveal its ‘green’ as multihued,” wrote Ida Hay of the Arnold Arboretum, “and its ‘open space’ as truly full with plants and the stories of the people who got them and nurtured them on its undulating acres.” So I sat in this truly multihued green and watched a jogging mother push a tandem stroller with sleeping twins—and wondered what sort of conveyances would carry visitors over Olmsted's carriageways 1000 years from now. ~

DANIEL MOUNT is an estate gardener and garden writer. He lives on a small farm in the Snoqualmie Valley. Read more of his reflections on plants and gardening at www.mountgardens.com.

Memories of Growing Up in the Arboretum

TEXT AND PHOTOGRAPHS BY VIRGINIA HANLEY MACDONALD



In the Winter 2012 "Bulletin," John Wott and Walt Bubelis wrote an account of the career of John H. Hanley, the Arboretum's first director. While researching the story, they contacted one of John Hanley's children, Virginia, who reminisced in several e-mails to John and Walt about her childhood memories of the Arboretum. Due to popular demand, her memories are published below:

"Looking back about 70 years is a real challenge. I was almost four years old when we moved to Seattle. My sister, Barb, was six, so we were all very young during those years when Daddy [Dr. John H. Hanley] was director of the Arboretum.

"I remember many fun outings with Daddy. I'm sure he was getting us out of mom's hair while she was pregnant and then busy caring for my new brother, Allen, and subsequently our sister Peg, who were born in 1940 and 1942, respectively. Unfortunately Barb (my older sister) is no longer with us to add her memories to this, as she really remembered more than I. Allen, the brains of the family, has been missing in the Mt. Hood area since late in the fall of 2011, so we can't pick his brain either." *(Tragically, his remains were found later.—John Wott)*

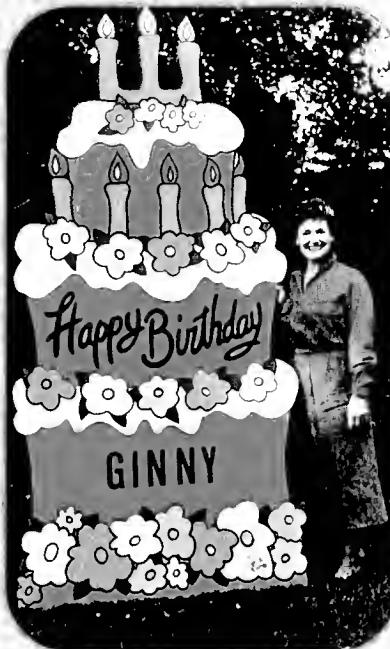
"But I'll recall the great times which I remember, if not with specifics, definitely with great happiness and enthusiasm. Both Mother and Daddy were great lovers of the outdoors.

ABOVE: Virginia's 71st birthday, celebrated with her grandchildren, from left to right, Caroline (11), Ashley (8), Katie (19) and Alex (13).



Mother had spent many years camping on Lake Michigan and Daddy had worked in the Smokies during his college years, and if I remember correctly they spent their honeymoon at a 'Trout Lake' somewhere north in Michigan or Wisconsin. (Google says there is Trout Lake in both states.) What a destination honeymoon THAT was.

"Anyway, Mom had received her Master's in Landscape Architecture at the University of Illinois where she met Daddy, who I understand had been one of her professors while he was earning his doctorate. Because of their mutual interest in horticulture and the great outdoors, its flora and its fauna, its majesty and its serenity, we had many family outings in the University of Washington Arboretum—walking



along Azalea Way, through the Rhododendron Glen, and along a little pond which was at the entrance to the Arboretum. We also enjoyed the Cascades, Pack Forest and the Snoqualmie area in particular. We also visited various small lakes, campgrounds and parks around Seattle.

"Two distinct activities at the Arboretum come to mind, which we repeated often throughout my early childhood.

"At that time Foster Island was undeveloped, and filled with cypress swamps, bamboo and irises of many varieties. I remember sitting on the banks, where we pulled out our fishing gear—the finest bamboo poles around (probably filched from the bamboo stands on the island) and learned to fish, putting

ABOVE: A family visit to Washington Park Arboretum. Front row: Peg's daughter Ginny, Barbara Hanley Campbell, Ginny Hanley MacDonald, Peg Hackenbruck (Hanley). Back row: Arthur Campbell, Allen Mills Hanley, Andy Hanley, Al's son. **INSET:** Ginny's 52nd birthday.



the worm on the hook, tossing it into the water to tempt the unsuspecting prey, and then waiting patiently for that nibble on the end of the line which brought forth the PRIZE... hopefully a fish large enough to take home.

"Daddy cut some pronged pole props from branches, so that we could rest the poles on them while we feasted on Mother's favorite picnic lunch—delicious deviled eggs, fresh tomato sandwiches, and Kool-Aid. When we got home, Dad taught us the final 'learning experience' of fishing... cleaning the blooming things in the backyard. Oh help!! That was disgusting!! But we forgot about the cleaning quickly, I remember—as soon as we tasted the delicious flavor of the fried perch Mother cooked for us for dinner. What a sweet, tender delicacy. It made the cleaning experience worth it, after all.

"It was also possible to canoe or row a boat around the island, and I have a very vague recollection of canoeing there. We also fished for bullheads out on the shore of Portage Bay, and probably on the Foster Island part of the Arboretum, too. They were funny-looking little fish and fortunately I never caught one that was big enough to take home, but as I write this I remember seeing a large one in my father's hands. My brother Allen was also with us. So

I wonder if we had some catfish for dinner that evening.

"These particular fishing days on the banks of Portage Bay were interesting because we would be on the open water instead of within the Arboretum itself, enjoying the view of the University of Washington stadium and boat docks. From our viewpoint the campus was to the left, and the point of Laurelhurst with our home was on the right, where Union Bay opened into Lake Washington with its pleasure boats on the water.

"The second activity I remember so well was picking blackberries with Grandma Jenkinson, our maternal grandmother. Every summer she would come out from Kansas City, Missouri, to stay with us—and she would go right along with us to pick the berries. They grew on the long fence beyond the present-day site of the Lathe House and were big, sweet and juicy, as well as profuse. We needed ladders to get to the top of the fence, but it was very prickly there. Barbara, being oldest and tallest of us children, was the designated climber. Grandma made the most delicious desserts and blackberry jelly from our buckets of berries. No one could make jelly and canned fruits and vegetables like Grandma Jenkinson.

ABOVE LEFT: Dad (Dr. John H. Hanley) and Ginny in 1936 **ABOVE RIGHT:** Trip to Pack Forest: Dad, Covey (a friend), Mom, Chris Zumqwalt, Barb and Ginny in spring 1939.

"We were really spoiled. It turned out to be a real blessing that grandma loved to cook and can foods because World War II was taking its toll on our economy, so preparing summer fruits and vegetables for consumption through the winter months was a real necessity.

"Mother and Daddy had a huge garden on their lots behind our house in Laurelhurst. But as an extension of his work at the Arboretum, Daddy had developed a Victory Garden on some of the University of Washington property below the main campus and across the Bay from the Arboretum. Here faculty, and possibly other, families could cultivate vegetables during the growing season for preserving for winter meals. I can't recall just who was eligible to use the Garden, but I know that it was on the U W property.

"It was there in a sort of swampy, marshy section of the garden that [sister] Peggy fell off a slippery log when she was really little and fortunately was pulled out by my brother and his buddies, but that was scary.

"I credit my love for the water, the mountains, forests and countryside, gardens and flowers and the out-of-doors in general to my parents' passion for the land and waters, which they shared with us in the many outings during our childhood. A person's passion for his work and interests is really infectious and I certainly caught my passion for the out-of-doors from them."

Virginia added the following memory in a later e-mail: "I keep thinking of little goodies about Daddy every once in awhile since sending the info off to you. Like, he loved to sing and sang up a storm around the house... things like "Velia," "I'm Gonna Sit Right Down and Write myself a Letter," "Oh Yeah" (remember that one?) and "The Road to Mandalay" while I played on the piano. We had a hoot of a time." ~

JOHN WOTT and **WALT BUBELIS** are "Bulletin" Editorial Board members.



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TEXT AND PHOTOGRAPHS

BY IAIN M. ROBERTSON

Responding to the Garden's Clues

*H*aving discussed the spatial aspects of garden experiences in the Spring issue of the "Bulletin," let me now turn to how a garden's materiality and its sensory delights are interrelated and must be considered in choreographing a tour. Garden experiences are more than just spatial; our engagement with their materiality delights the senses, and our tour choreography must consider these cues. Spatial experiences tend to be subconscious, but the material components of gardens are central to our conscious experience—the sight, feel and smell of plants; the sound of water; the crunch of gravel; the glint of sunlight. The list goes on...

At risk of stating the obvious, it is worth mentioning that tours should engage all the senses. As Yogi Berra might say, had he been a Japanese Garden tour guide: "You can hear a lot by just listening," and "You can feel a lot by just touching." Guides use a variety of methods to elicit sensory responses: asking visitors to brush gently past plants or pat moss to feel its resilient springiness, to notice how feet respond to gravel paths compared to steppingstones when crossing a stream, to feel the difference between pines with pliant needles and those with firm, prickly ones. How else might we encourage visitors to engage more senses than just sight, without damaging the garden?

Information

Sometimes we turn to gardens and their direct, sensory experiences to escape the inces-

LEFT: Paradoxically—and the garden is always paradoxical—it might be easier to engage the imagination when the garden is cold, damp and foggy, when things begin to merge in a blur.



sant overload of the “Information Age.” But one of our primary “jobs” as guides is to inform visitors, so our next concern is how to engage the mind as well as the senses. Paradoxical though it may sound to educators who favor antiseptic classrooms, the more the senses are stimulated, the more engaged the mind becomes. Thus one is not evading one’s responsibility as a source of information if, instead of simply informing visitors, one asks them to look, listen, touch—to use all the senses. We do so to encourage visitors to understand a garden

through making sensory experience and mental understanding symbiotic. In contexts where sensory rewards are sparser, this approach may be ineffective, but in the context of gardens it’s crucial to make the visit tangible as well as mental. The choreographer’s job may consist of posing well-timed and carefully crafted questions. One might, for example, be tempted to ask, while crossing the stream, whether it is speaking in Japanese or English.

The guide’s job is more than just providing a stream of information. Above all we should

ABOVE: A view may be worth a thousand words, but a well-chosen word may also bring a scene to life, allowing us to see it from a fresh perspective. It’s not a question of talk versus silence but of choosing words that encourage visitors to observe more closely and feel more deeply.

avoid the fire-hose approach. Perhaps our job is to provide information on a “need-to-know” not a “need-to-tell” basis. Choreographing the interplay of information and experience is a guide’s most essential skill. Our job consists of integrating a sequence of experiences with information, deciding when and where to say—as much as what to say—with the goal of putting visitors in the right frame of mind to get the most from the experiences. Thus we decide what route to take, where to pause, and when and how to move on, at the same time we decide what to say. Questions may be a guide’s best friend. We may ask, “What do you notice standing here?” or “How might a 16th-century owner of a garden like this have responded to this view?” And the perennial question, which should not be the exclusive province of two-year-olds, “Why?”

Asking questions ensures that the tour is not just about the garden itself, but is about the visitor too! So a tour is not just a story, a dance, a lecture and an experience; it is also a conversation—a conversation whose goal is to convert visitors!

Conversations and Feedback

“It’s all about communication—getting on the same wavelength as one’s group. Ask where they are from to try and see where they are coming from mentally.”

—Unit 86 volunteer

A garden tour is a three-way conversation between visitors, the guide and the garden. In David Abram’s words, we wish to merge the “mind” and “psyche” of this place with the mind and psyche of each visitor. Effective guides are good listeners as well as good talkers, always asking themselves, “Do I have the balance right?” and “Am I connecting?” Or they are asking, “Do I see what you mean?” as well as “Do you see what I mean?” and “Do we both see what the garden means?” We must also be open to the possibility that the garden may mean different things to different people, may mean different

things at different times, and might even change its mind. In design, there is never one right answer.

Other questions that may occur to a guide creating a tour experience could include: “How much should I explain and how much should I ask questions?” “How much should I let the garden provide the answers?” “How should I respond to keep the conversation going?” The guide’s job includes deciding what to draw attention to and how to “frame” views both mentally and physically.

The goal of the conversation is to help visitors make discoveries for themselves rather than to provide answers. There is an art to telling visitors about the garden in ways that makes them more observant, rather than supplying information that negates the need to look and think—to tell, suggest and ask in ways that reveal new perspectives that enrich experiences.

Some examples include: “So, why do you think these leaves are a different color from those over there?” or “Why do you think the designer made the bridge crooked rather than straight?” The questions one could ask are endless. Some have factual answers, but we should not be afraid of posing open-ended questions to which there are no definitive answers. These make one think! As one guide put it, the goal of a tour is to integrate senses and intellect, to generate a holistic view of the world.

Surprise, Surprise

But, what creates the most intense surprise,
His soul looks out through renovated eyes.

—John Keats, “Ode to Apollo”

Suggesting that one of a guide’s tasks is to surprise visitors may be surprising, but surprises can be shockingly revealing and memorable—which, of course, is what we want visits to be. Surprise and confirmation; doubt and reassurance; anticipation and reward; these are dramatic techniques that remind us that a tour is also a



play. While we must begin by building reassurance and comfort to make visitors open to experience and ideas, we must also spice our tours with surprises—dramatic effects that drive home messages, that challenge, that leave us wondering. How do we wish the acts of the play to intersect with the garden's scenes? We are, after all, on location!

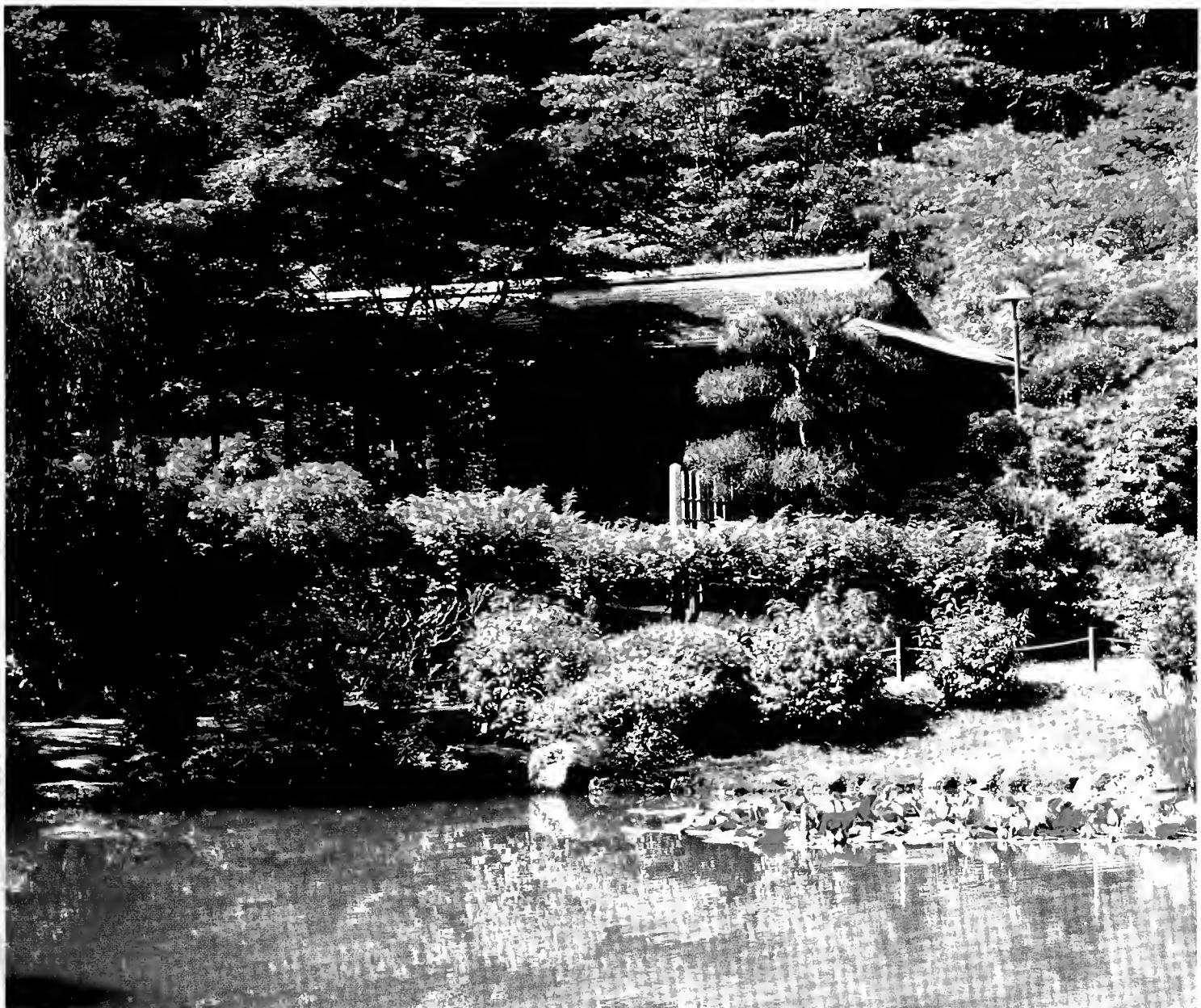
There's no doubt that making the narrative score fit the spaces, features and sequences of the garden is crucial for a successful tour. But guides must do more; they must discretely amplify or highlight the garden's messages without distorting them—make them larger than life without becoming caricatures.

In a sense, our tours are the makeup on the garden's face.

Engage Imagination

It's taken a long time to get here, following roundabout routes, but my main point is that successful garden tours engage visitors' imaginations. Rich realities reward imagination. A designer has probably considered how the garden's paths, plants and places orchestrate and sequence experiences, create expectations, withhold and provide rewards, and offer answers to questions such as: "What do you think we might see around the next corner?" and "Are we there yet?" Nature may have

ABOVE: Perhaps a "prompt" provided by guides will change with the garden's mood: sun or rain, wet or dry, hot or cold, summer or winter.



provided answers to other questions, such as "What do you think the underside of the leaves look like?" and "What would this scene look like in winter, in the evening, in sunny weather?" Culture, however, may have answers to questions such as "What patterns do the fallen leaves make, and how have they been interpreted in art?"

If we engage visitors' imaginations, our tour has succeeded regardless of how much information we may have managed to insert into the discussion, whether the sun shone or the rain rained, or whether it was a whirlwind, whistle-stop tour or a leisurely, contemplative perambulation. To engage the imagination is to

unify all experiences and to align these experiences with the garden.

Other questions to pose: "How would the owner of a garden like this in traditional Japan have understood and responded to features/experiences?" "Have we been able to walk a bit in another's muse?"

How could I advise him? she says. Whatever he does it'll be wrong.

Why wrong?

It always is. He thinks about it too much. It's all theoretical to him.

—Gabriel Josipovici, "In a Hotel Garden"

ABOVE: Sitting in the shade of the teahouse on a hot afternoon, what conversations might it inspire, and what might it have to say for itself?



We must get beyond the abstract and theoretical. Our information must be fully integrated with the experience, which itself is part and parcel of the garden. The difference between school-age and adult visitors, according to several guides is that "kids are much more willing to engage their imaginations, while adults are more reticent and restrained." To enter the kingdom of the imagination we must become as little children.

Drawing to a Close

If we have choreographed our tour well, if our visitors have behaved, if the weather has smiled, if the garden's charms have not inveigled us to stop too often, then we will find ourselves drawing to a close with a few moments to tie a bow to ornament the experience.

But wait! Have we remembered to celebrate the garden's crescendo; its "deep-heart's" core; its central message, experience and place? Did

ABOVE: The narrative path draws to a close.

we stop our tour at an appropriate point to say, "Now we have arrived. Now we are here. Now."? Perhaps that was the place where we said, "Stop! Close your eyes and feel the garden with your skin and ears." Have we, in Abram's words, "turn[ed] inside-out"? Have we "loosen[ed] the psyche from its confinement within a strictly human sphere"? Has the garden "free[d] sentience to return to the sensible world that contains us"?

A tour's end (and an article's end!) is not the place to spill forth everything that inadvertently got omitted. One must trust that the genius of the place has done its work and that visitors will return in memory, if not in person. Now is the time to prepare the psyche for re-entry to daily life. Exits matter.

It is commonplace to observe that first impressions are important, but—though less commonly noted—so, too, are good good-byes. How do we successfully end a tour? Hopefully

not with a mad dash for a bus impatiently blowing its horn or threading our way through the obligatory gift-shop maze. What "take-home" messages and memories do we wish to impart? What would we most like visitors to remember? Do we have a favorite place in which to deliver a few well-chosen parting words? Have our visitors been captivated by the garden? Is part of their "inner core" now an "intensified garden"? Will they return? ~

IAIN ROBERTSON is an associate professor of the Landscape Architecture Department and an adjunct faculty member in the Center for Urban Horticulture and School for Forest Resources at the University of Washington. Like the Unit 86 guides, he, too, has fallen under the spell of Washington Park Arboretum's Japanese Garden.

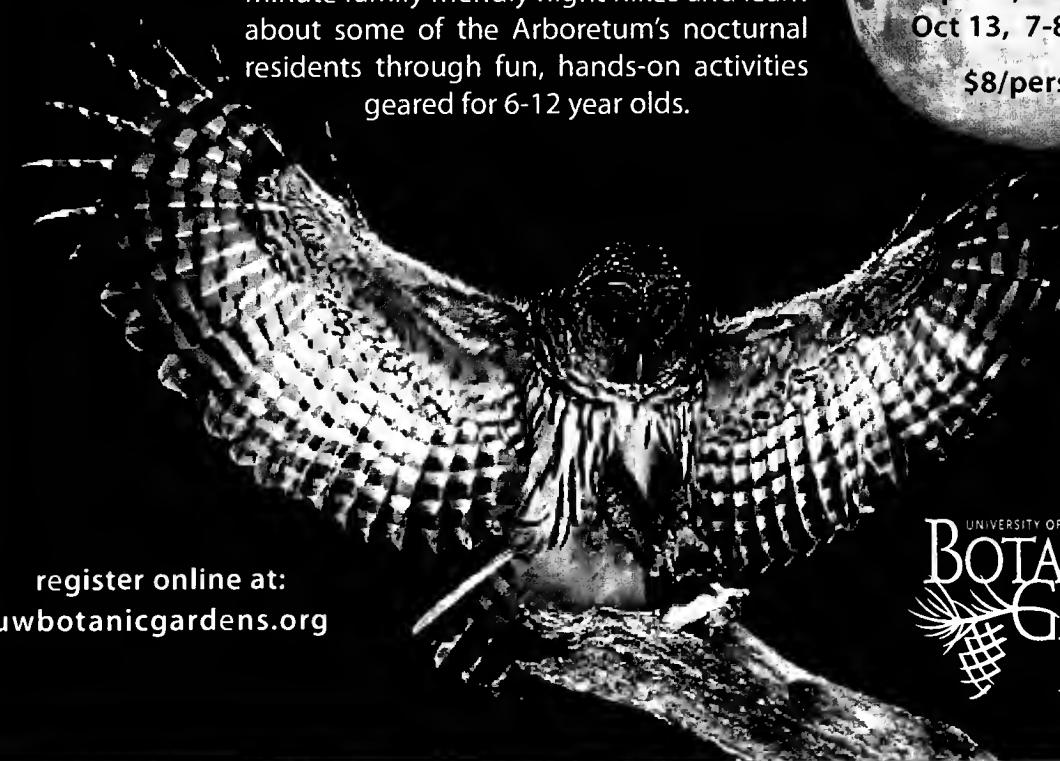
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Winners of the CBHL Literature Award

BY BRIAN R. THOMPSON

In the last issue of the "Bulletin," I introduced the Council on Botanical and Horticultural Libraries Annual Award for Significant Work in Botanical or Horticultural Literature (CBHL) as one of the measures of greatness for books on botany or horticulture. My review profiled a few of the winners that recounted the history of plants and the people passionate about them. In this column, I'll complete my selective review by choosing award-winning titles that profile a particular plant group and are of special interest to those who love the Arboretum.

Local Winner—Ferns

The CBHL Literature Award has highlighted the talented writing we have in Washington, as two of the winning books are by residents of the state and a third is by a long-time former resident.

I'll begin with my personal favorite of these local treasures, "The Encyclopedia of Garden Ferns" (awarded in 2008) by Sue Olsen. Quoting myself from the awards Web site, "For those not already fans of ferns, the author's infectious and informative style will convert...with that extra insight available only from a writer who knows her subject thoroughly."

While addressing a global audience, this is one of the very select treasures of Pacific Northwest garden writing and must not be missed, even if you garden on a sunny, dusty slope. In addition to the expected information on cultivation and propagation, Olsen covers the natural history and taxonomy of these fascinating plants, making it of interest to more than just gardeners. The many appendices are excel-

lent, too, with the most intriguing being a collection of lists of favorite species by a global who's who of fern specialists, whose gardens range from hardiness zones 4 to 11.

But the heart of the book is the tour of "Ferns from Around the World." At first glance, this resembles many A-Z listings, but there are some key enhancements not often found elsewhere. Common names are listed, but these are real common names, not made up to fill a slot. The meanings of both the genus and specific epithet are given, the latter being particularly useful with ferns. The descriptions are thorough but without the mind-numbing detail of many botanic writings. And the photographs are superlative, with almost all having been taken by the author.

This is all very good, but Olsen is at her best in the "Culture and Comments" sections. This is where you can tell what she knows is from first-hand experience, and it shows her skills as a writer, too. For example, she notes that "Most Polystichums are considered horticulturally hardy (which means temperate rather than 'easy' as in some interpretations...")

Her stories will resonate with any gardener. "When my lone plant is threatened with sweeping arctic freezes, I cover it with horticultural gauze. My last carefully spread protective blanket for such nurturing was carried away by a presumably needy crow and found the following morning in the upper limbs of a neighbor's tree. The fern survived." And at carefully spaced moments, Olsen shares her passion: "This is THE species that inspired my interest in cultivation, propagation, and immersion in the wonderful

world of ferns." This last sentence is in praise of *Dryopteris erythrosora*, the autumn fern.

Local Winner—Bamboo

Ted Jordan Meredith uses a similar style of engaging writing—perhaps because he is also from Washington state—in "Bamboo for Gardens" (awarded 2002). Like "Ferns," this book is intended for a general audience, but its locality makes it a must if you're considering using these giant grasses in your garden. While most of the photos are close-ups of their subject, it's fun to see rhododendrons or a Douglas fir lurking in the background of wider shots.

Wherever you live, this would be an important and useful book. While there is the expected A-Z encyclopedia of species, it is unusual that the introductory material—such as culture, propagation and uses in the landscape—fills more than half the book. Some unexpected treasures can be found here, including the use of bamboo in both traditional and modern economies, and tips on eating bamboo.

You will learn, for example, that the edible shoots of *Qiongzhuea tumidissinoda* "are considered exceptional." The fun continues in the encyclopedia section as we learn that this same, nearly unpronounceable species, which hails from central China, is harvested for walking sticks, and "...is the subject of history, myth, and fable in Chinese culture, dating back to at least the Han Dynasty in the first or second century B.C."

While the author keeps the writing interesting, the more mundane information is very solid, including his discussions of how to deal with "...an attack from the demonic plant that invaded unexpectedly and ceaselessly, and could not be stopped or killed." With the voice of experience and fondness that one might expect to be used on an errant puppy, Meredith carefully explains the different methods of containment for running bamboo.

West Coast Conifers

"Conifers of California" (awarded 2001 as Honorable Mention) is a delightful introduction

to many of our native conifers, as well as the incredible diversity of these cone-bearing trees to be found farther down the coast from Washington. Author Ronald M. Lanner writes what could be best described as a biography of each tree, telling the natural history and the interaction of each with humans and animals. While there are helpful descriptions with the photos and drawings, (including "At a distance," "Standing beneath it," and "In the hand") this is not primarily a field guide.

The photographs are excellent, but a bigger visual draw are the botanical paintings by Eugene Otto Walter Murman (1874-1962), which besides being beautiful, clearly show the distinctiveness of the cones, cone scales, seeds, needles in a single bundle, and a growing tip. Adding to the history are quotes by some of the great describers of trees, including Charles Sprague Sargent, John Muir and, one of my favorites, Donald Culross Peattie.

I'm adding Lanner to this list. His descriptions of the relationship between the Clark's nutcracker and whitebark pine (*Pinus albicaulis*), or the unusual combinations of factors that lead to the long, long lives of the bristlecone pine (*Pinus longaeva*), are detailed and lengthy but totally engaging.

Of the incense-cedar (*Calocedrus decurrens*) he explains how forestry practices have led to a population explosion of this tree little valued by the timber industry. This is "...good for those Americans who eschew the use of greasy-inked ballpoint pens, because incense-cedar is the unrivaled champion of available domestic pencil-woods. It may not be so good for those...who must pass through thickets...for those thin, dead, lower limbs seem always positioned to welt a cheek or poke an unsuspecting eye."

Many of the more rare California conifers can be found in the Arboretum, and this book is a good introduction. Look for the Coulter pine (*Pinus coulteri*)—but don't stand under its eight-pound cones "with talon-like appendages!"—and for the weeping Brewer spruce (*Picea breweriana*) with "long, dark-foliaged, pendulous branches," which comes from the Siskiyou Mountains.



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Briefly—Two other winners have special interest for readers of the "Bulletin." Edward Anderson was for 30 years a biology professor at Whitman College in Walla Walla before finishing his career at the Desert Botanical Garden in Phoenix. "The Cactus Family" (awarded 2003) is the culmination of his life's work as, sadly, he died shortly after publication. But more importantly, because it will be a long-time standard reference for these popular plants.

While not a gardener's book, this provides a superb view of the remarkable diversity of cacti—well captured by excellent photographs, most by the author and many in situ. Highly recommended, too, are the chapters on ethnobotany and conservation of cacti, which illustrate how important these plants have been and continue to be throughout their range in North and South America.

Another winner (awarded 2005) is "Native Trees for North American Landscapes: From the Atlantic to the Rockies." The sub-title is very important as trees native only west of the Rockies are excluded. But almost all trees that are included can be found in the Arboretum, and many are widely planted in our region and available in nurseries.

As the title suggests, authors Guy Sternberg and Jim Wilson address their book to gardeners and landscape designers, but there is also much here to interest those who love trees for their place in the natural landscape and how they have been interwoven with human history. Like all the award winners, the quality and diversity of the photography is impressive, and well-linked with the engaging text. ~

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An Interview with Sarah Reichard

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the level of our sister institutions, but we want to improve our technologies. I am working on a grant which will improve the mapping of the WPA. My goal is to have the map integrated with all our known information. For example, if you are interested in the magnolias or the hemlocks, then we enter that information online. We have these plants in collection areas, but they are also spread throughout the WPA. We could create a custom-made map on your computer, which you could then use to find all the plants when you visit the WPA.

Dr. Wott: With all the advancement in handheld electronics, the possibilities are amazing. We used to talk about checking out disc players, or placing speaker chips next to the plants, but now the electronic world is moving beyond those ways.

Dr. Reichard: Along with this, we need to also build the Web sites to support all the information.

Dr. Wott: Any further ideas on efficiencies?

Dr. Reichard: Both the UW and City of Seattle are struggling for funds. The community is becoming increasingly aware of funding needs. In recent reductions, we have really been cutting core functions. We maintain 230 acres of an Arboretum with five permanent UW staff and a few hourly workers, plus the City's four to five staff members. We manage the nearly 90 acres of the CUH and UBNA with even fewer staff. The staff does a magnificent job, but we need to think about how to increase revenues in order to maintain a proper staff ratio.

Dr. Wott: How do you see your role in working with all the Arboretum partners—the City, the UW and the Arboretum Foundation?

Dr. Reichard: There is a long-standing relationship. Fortunately I have the people who came before me to show me how to work on this relationship. The role of the UW is to develop a collection of plants which are scientifically meaningful, (often wild-collected), and

to provide education and interpretation about these plants. We need to help people understand the WPA better through interpretation, walking loops and improved mapping. We need to work with our partners to achieve all of our goals. My role is being one of the partners, but because the education program revolves around the collection, we have a leadership role.

Dr. Wott: How do you tie the activities of CUH and the WPA together?

Dr. Reichard: This is an interesting time. In the past, the cultures of CUH and WPA were different. The budget cuts now mean that staff have to work on both sides of the Montlake Cut. Fewer staff are dedicated just to one side. For example, our education program occurs on both sites. It appears to me that the staff have moved to understand there needs to be more inclusiveness. This is not perceived as much by the public. I am hopeful that the Foster Business School students can help us figure out how to communicate more effectively, so these changes are understood. We do already refer to ourselves as UWBG. In reality it is only Union Bay which breaks us apart.

Dr. Wott: Do you have any parting “words of wisdom”?

Dr. Reichard: I am really excited about the future. Presently, it is not easy, but the economy seems to be moving upward again. We will never go “back to the good old days,” but certainly there are new opportunities. A year ago I ran across an historic document. It stated that during “an economic downturn both the city and state did not have enough money to fully fund the WPA, and the Arboretum Foundation did not currently have the capacity to take it all over.” The date was 1938. Today it is still the same funding-model situation, but I believe we can work together to change things and to leave things in a more secure place through building revenues, endowments, partnerships and programs. ~



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